```python

from a0_items import *

from datetime import timedelta, date



def get_date_today ():

    date_today = date.today()

    return date_today



# https://www.programiz.com/python-programming/datetime/strftime
def get_date_time_now (dt_format):

    # datetime object containing current date and time
    now = datetime.now()


    match dt_format:

        case "1":
            # dd-mm-YY H:M:S
            dt_string = now.strftime("%d-%m-%Y %H:%M:%S %p")
            print("date and time =", dt_string)

            return dt_string

        case "2":
            # dd_mm_YY_H_M_S
            dt_string = now.strftime("%d_%m_%Y_%H_%M_%S_%p")
            print("date and time =", dt_string)

            return dt_string

        case "3":
            # dd_mm_YY_H_M_S
            dt_string = now.strftime("%d_%b_%Y_%H_%M_%S_%p")
            print("date and time =", dt_string)

            return dt_string


get_date_time_now (dt_format='3')




#calculate ALL dates between two dates - https://www.tutorjoes.in/Python_example_programs/get_list_of_dates_between_two_dates_in_python
def get_date_range(start_date, end_date):

    LIST_date = []

    for n in range(int ((end_date - start_date).days)+1):

        date_value = start_date + timedelta(n)
        #print (date_value.strftime("%d_%b_%Y"))

        LIST_date.append (date_value.strftime("%d_%b_%Y"))

    return LIST_date
```

```
66
67  #get_date_range(start_date= date(2024, 1, 1), end_date= date(2024, 12, 31) )
68
69
70
71  import pandas as pd
72
73  #print (pd.date_range(start="2018-09-09",end="2019-02-02").to_pydatetime().tolist())
74
75
76
77  def get_24_hour ():
78
79     LIST_hour = []
80
81     for x in range (24):
82
83        LIST_hour.append(x+1)
84
85     return LIST_hour
86
87
88  #print (get_24_hour ())
89
90
91  LIST_30m_range = ['00', 29, 30, 59] #every 30m
92  LIST_60m_range = ['00', 59] #every 60m or 1 hour
93
94  def get_dt_every_30m (start_date, end_date):
95
96     LIST_date = get_date_range (start_date, end_date)
97     LIST_hour = get_24_hour ()
98
99     LIST_dt_every_30m = []
100
101    for date in LIST_date:
102
103       for hour in LIST_hour:
104
105          dt_name_1 = ('FROM_' + date + '_' + str(hour) + '_' + str(LIST_30m_range[0]) +
           '_TO_' + str(hour) + '_' + str(LIST_30m_range[1])).replace('-', '_')
106          dt_name_2 = ('FROM_' + date + '_' + str(hour) + '_' + str(LIST_30m_range[2]) +
           '_TO_' + str(hour) + '_' + str(LIST_30m_range[3])).replace('-', '_')
107
108          LIST_dt_every_30m.append (dt_name_1 )
109          LIST_dt_every_30m.append (dt_name_2 )
110
111
112    return LIST_dt_every_30m
113
114
115 '''
116 LIST_test = get_dt_every_30m (start_date= date(2024, 1, 1), end_date= date(2024, 12, 31))
117
118 for x in LIST_test:
119
120    print (x)
121 '''
122
123
124 def get_dt_every_60m(start_date, end_date):
125
126    LIST_dt_every_60m = []
127
128    LIST_date = get_date_range (start_date, end_date)
129    LIST_hour = get_24_hour ()
130
```

```
    for date in LIST_date:

        for hour in LIST_hour:

            dt_name_1 = ('FROM_' + date + '_' + str(hour) + '_' + str(LIST_60m_range[0]) +
            '_TO_' + str(hour) + '_' + str(LIST_60m_range[1])).replace('-', '_')

            LIST_dt_every_60m.append (dt_name_1 )

    return LIST_dt_every_60m

'''
LIST_test = get_dt_every_60m(start_date=date(2024, 1, 1), end_date= date(2024, 12, 31))
for x in LIST_test:

    print (x)
'''


def get_dt_every_day(start_date, end_date):

    LIST_day = []

    LIST_date = get_date_range (start_date, end_date)

    for date in LIST_date:

        dt_name_1 = ( 'FROM_TO_' + date ).replace('-', '_')

        LIST_day.append (dt_name_1)

    return LIST_day


'''
LIST_test = get_dt_every_day(start_date=date(2024, 1, 1), end_date= date(2024, 12, 31))
for x in LIST_test:

    print (x)
'''

```